

FIG. 1

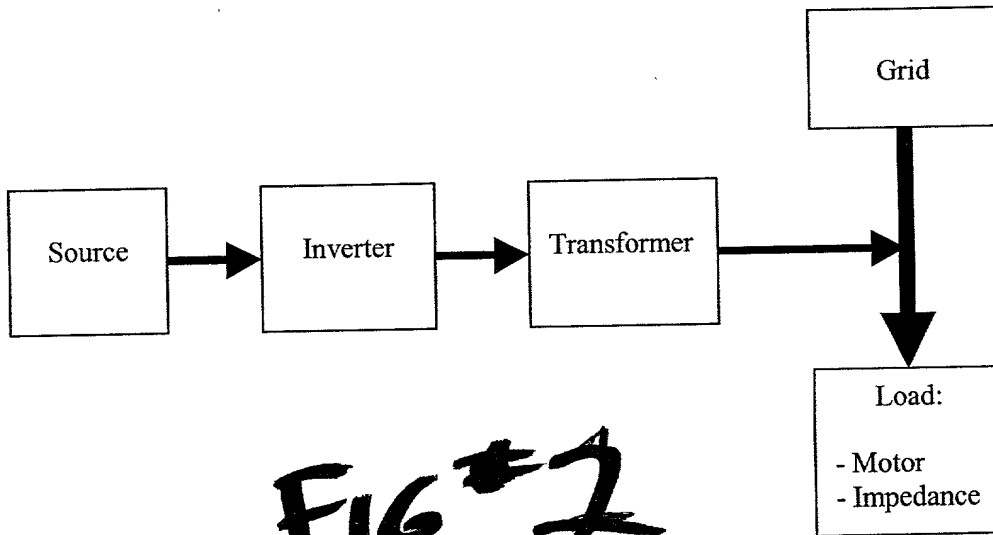


FIG. 2

FIG. 2

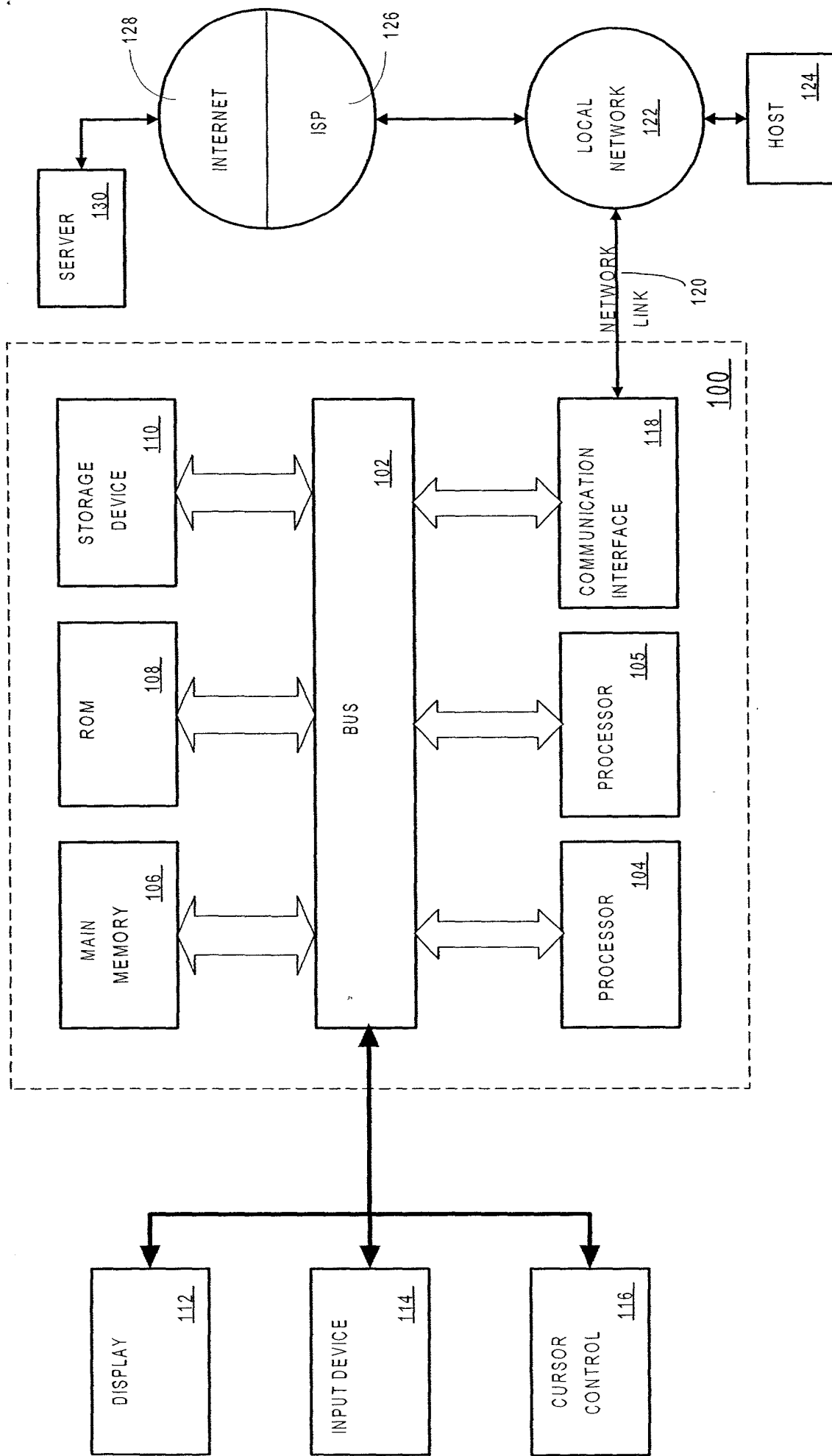
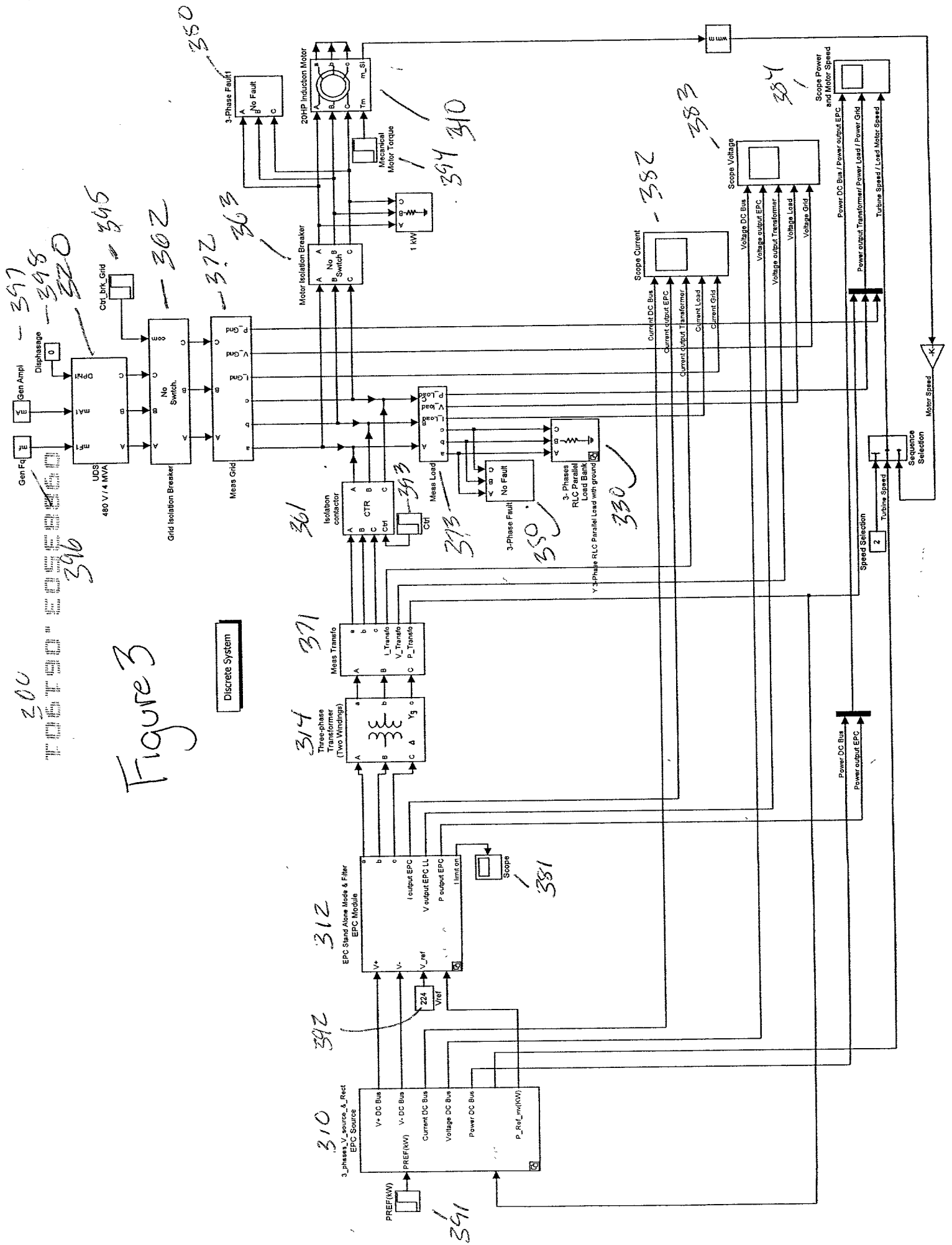
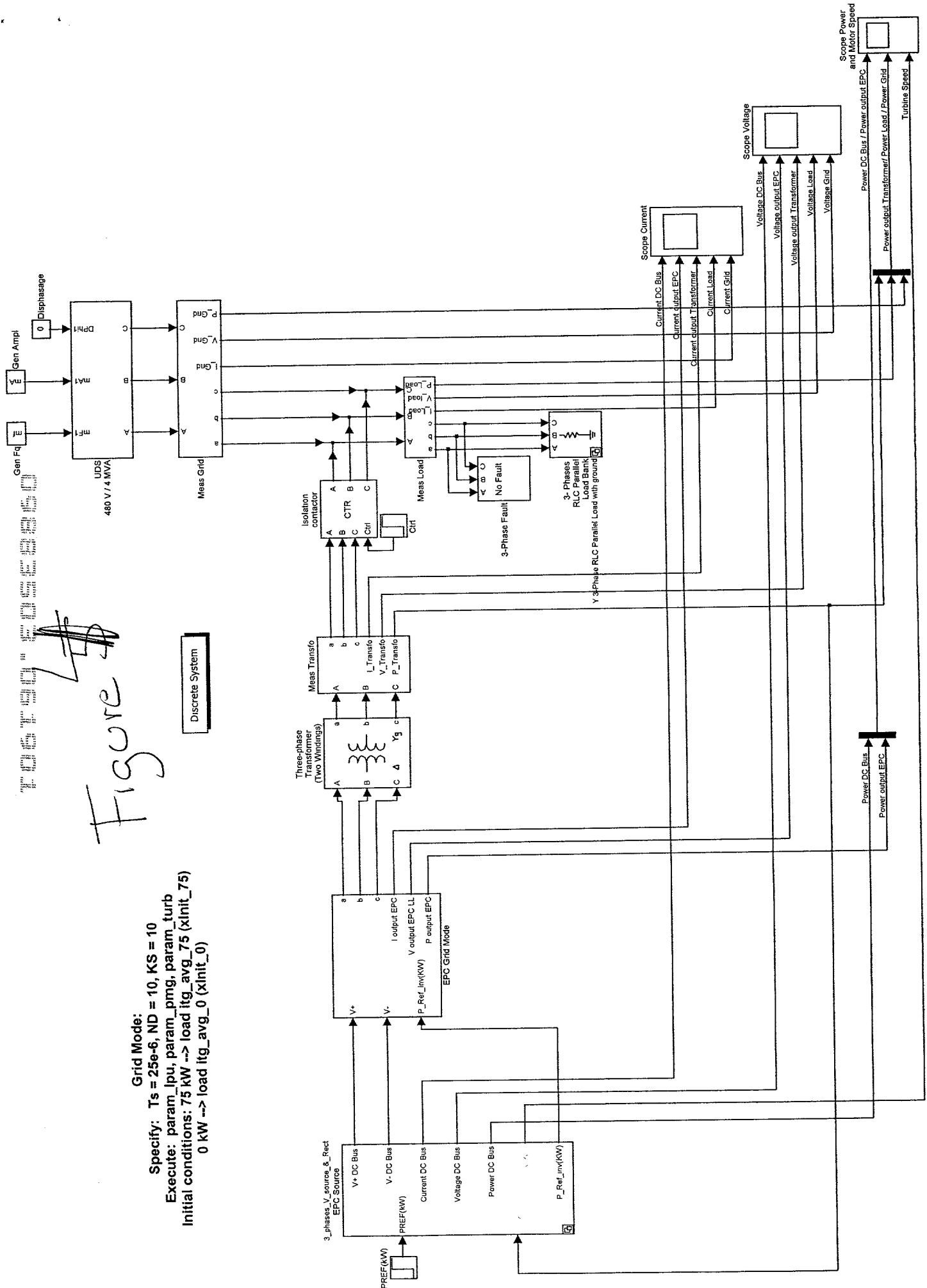


FIG. 2

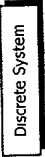


Grid Mode:
 Specify: $T_s = 25e-6$, $ND = 10$, $KS = 10$
 Execute: param_lpu, param_pmg, param_turb
 Initial conditions: 75 kW --> load_ltg_avg_75 (xinit_75)
 0 kW --> load_ltg_avg_0 (xinit_0)

Figure 3



FILED



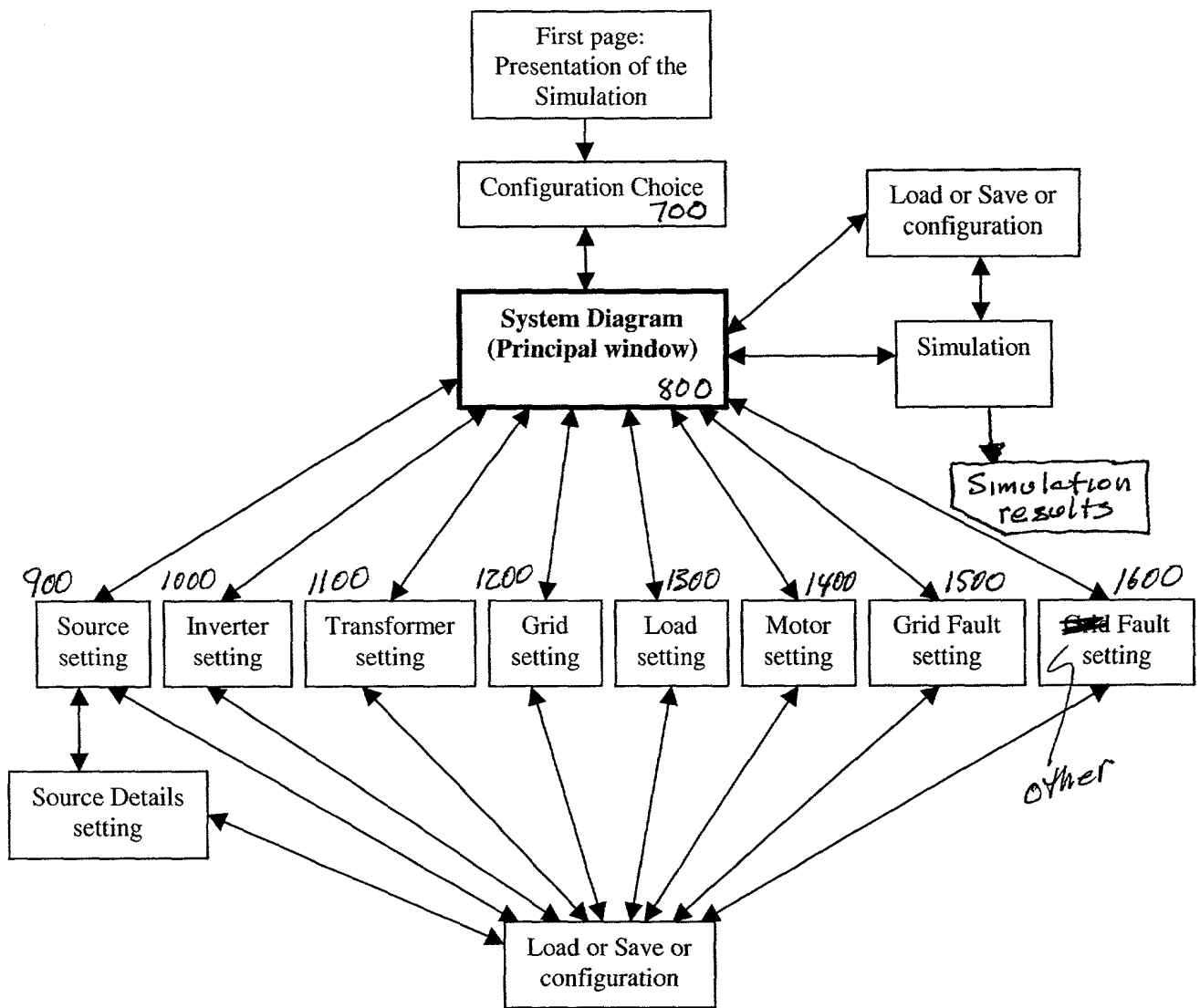


FIGURE 6.

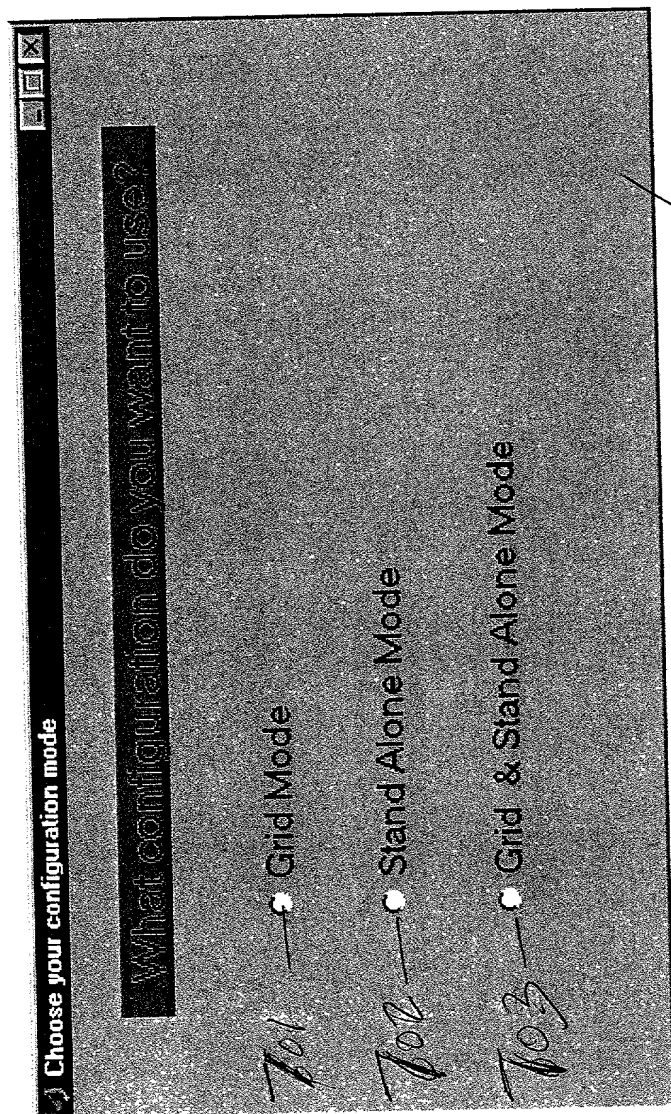


Figure 7

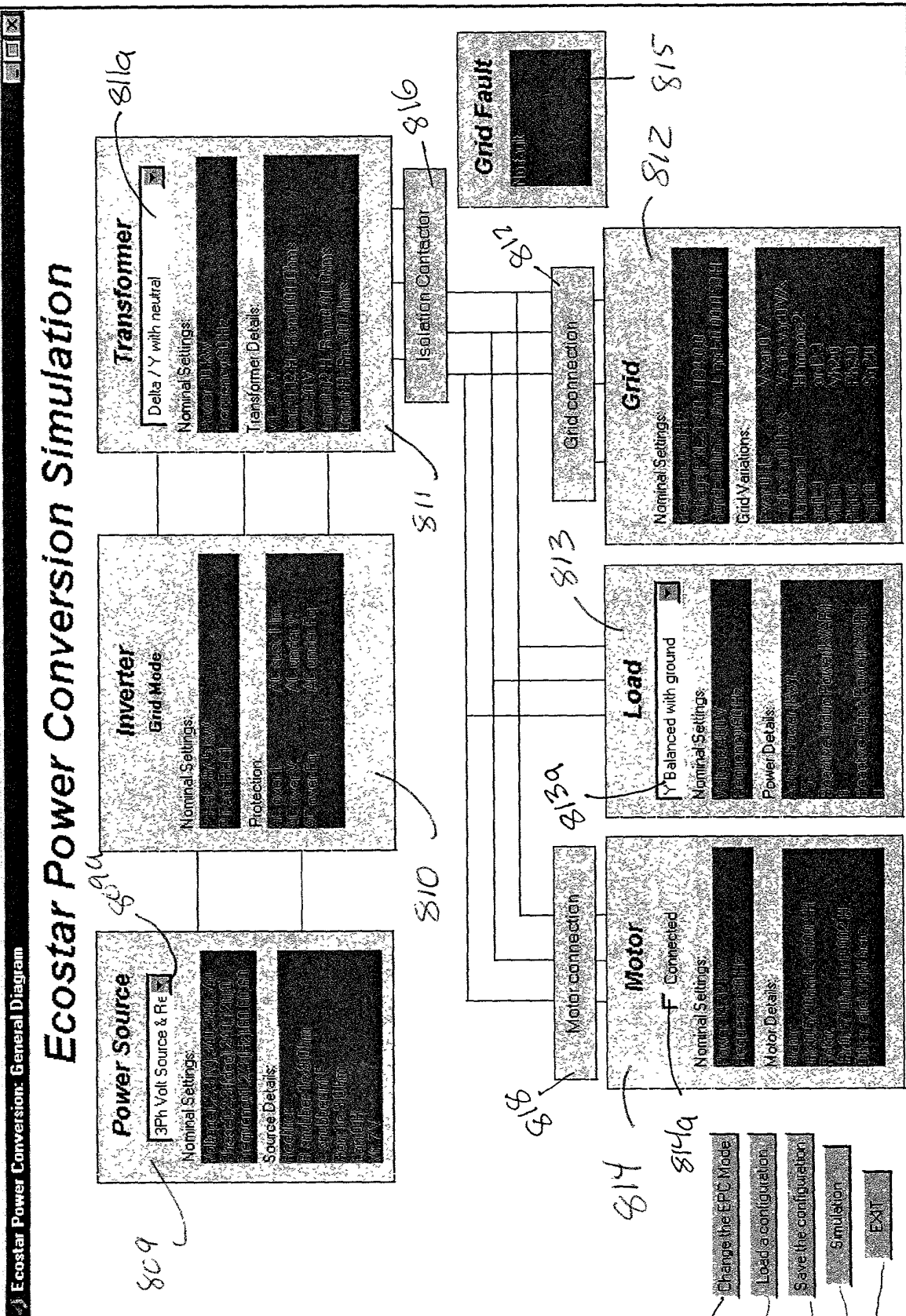


FIGURE 8

Source setting:

SOURCE

Load a configuration

Save the configuration

Source

3Ph Volt Source & Rect

Source Details:

Snubber R:1e-9 Ohms
Snubber C:inf F
R on:1e-9 Ohms
L on:0 H
Vt:7 V

Nominal settings:

902

Voltage 1 (Peak Ampli)

300V

340

400V

901

Frequency 1

45Hz

60

1100Hz

Voltage 2 (Peak Ampli)

300V

340

400V

Frequency 2

45Hz

60

1100Hz

Voltage 2 (Peak Ampli)

300V

340

400V

Frequency 3

45Hz

60

1100Hz

OK



FIGURE 9 a


Source Details setting:


SOURCE Details


Load a configuration


Save the configuration

Snubber R:  0 Ohms  10 Ohms

Snubber C: 1e-9 F  inf

Ron: 0 Ohms  10 Ohms

Lon: 0 H  1e-3 H

Diode Voltage Drop: 0 V  5 V

OK

910

Figure 9b

Inverter setting:

Inverter

Load a configuration

Save the configuration

Operation Mode: Stand Alone Mode

Nominal settings:

Power

75

60kW

200kW

Power Factor

1

0.75lag

0.75lead

Inverter Protection: Not available in this release

AC over voltage

80%

200%

AC over current

100%

200%

AC over frequency

45Hz

65Hz

AC sustained limit

80%

200%

AC under voltage

30%

100%

AC under frequency

45Hz

65Hz

OK

Figure 10

Transformer setting:

Transformer Type:

Delta / Y with neutral

Nominal settings:

Power:

90

50kW

Frequency:

60

45Hz

Magnetisation settings:

Rm (pu):

30

10 Ohms

Lm (pu):

Inf

1 H

Winding 1:

Voltage:

257

200V

R1:

0.01

1e-4 Ohms

L1:

0.02

1e-3 H

Winding 2:

Voltage:

480

200V

R2:

0.01

1e-4 Ohms

L2:

0.02

1e-3 H

OK

Figure 11

Grid settings:

GRID

Load a configuration Save the configuration

Nominal settings:

Frequency: 60 45Hz 65Hz

Voltage Positive Insertion: 391.918 326V 467V

Voltage Negative Insertion: 0 0V 46V

Voltage Zero Insertion: 0 0V 46V

The amplitude are the peak amplitude

Grid Variation:

Voltage Mag Var Amplitude: 0 0V 40V

Frequency Var Amplitude: 0 0Hz 10Hz

Voltage Mag Var Rate: 0 0V/s 20V/s

Frequency Var Rate: 0 0Hz/s 10Hz/s

Harmo Insertion 1: 0 0V 56V

Harmo Insertion 2: 0 0V 56V

Phase: 0 0deg 360deg

Rank 5 Seq 2 Rank 7 Seq 0

OK

Figure 12

Load settings:

LOAD

Load Type:

Y Unbalanced without grou

Load a configuration

Save the configuration

NOMINAL SETTING

Nominal Voltage

480

400V

500V

Frequency

60

45Hz

65Hz

ACTIVE POWER

Phase 1

15

0 kW

80 kW

Phase 2

10

0 kW

80 kW

Phase 3

5

0 kW

80 kW

REACTIVE INDUCTIVE POWER

Phase 1

0

0 kVAR

80 kVAR

Phase 2

0

0 kVAR

80 kVAR

Phase 3

0

0 kVAR

80 kVAR

REACTIVE CAPACITIVE POWER

Phase 1

0

0 kVAR

80 kVAR

Phase 2

0

0 kVAR

80 kVAR

Phase 3

0

0 kVAR

80 kVAR

OK

Figure 13

Motor settings:		Load a configuration		Save the configuration	
MOTOR					
Nominal settings:					
Power	50kW	Voltage	300V	Frequency	45Hz
	200kW		800V		65Hz
					1e-6 H
Stator:					
Rs (Ohm)	10 Ohms	Ls (H)	0 H	Lr (H)	0 H
	50 Ohms		1e-6 H		1e-6 H
Rotor:					
Rr (Ohm)	10 Ohms	Lr (H)	0 H	Lr (H)	0 H
	50 Ohms		1e-6 H		1e-6 H
Mechanical:					
Inertia	300V	Friction Factor	1	Mechanical Torque	0 H
	800V		50 Ohms		1e-6 H
Initial conditions:					
Slip		Theta (deg)		phi, phb, phc (deg)	
OK					

Figure 14

Isolation Contactor settings

Motor Isolation Contactor

Initial Status (0=open, 1=closed)

Time Transition

Transition Status

Breaker Parallel Resistance Rp(Ohm)

Breaker Series Resistance Rp(Ohm)

10 Ohms 50 Ohms

10 Ohms 50 Ohms

OK

Load a configuration

Save the configuration

1600

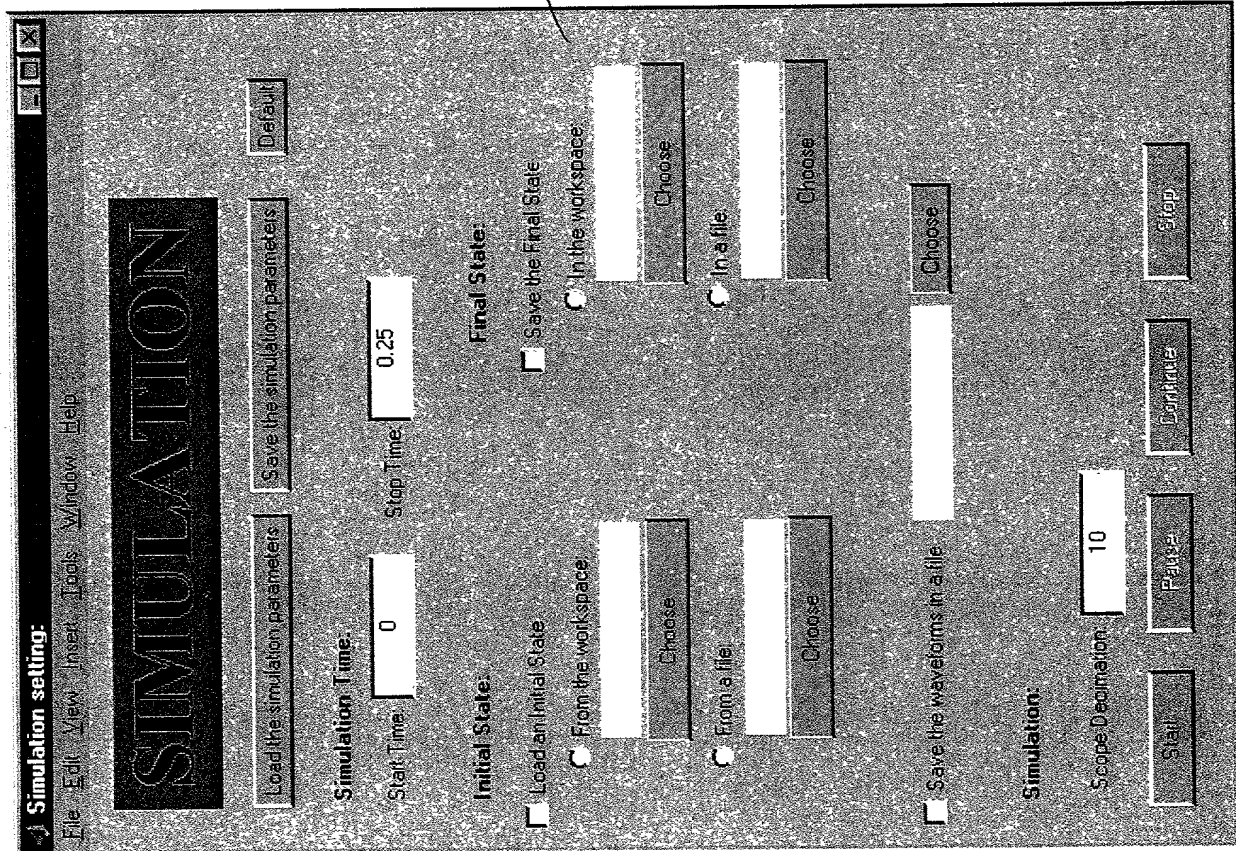
Figure 16

Change the System Mode

Do you want to change the system mode?
The last model modifications won't be saved

Yes Save No

Save button saves the model and the settings



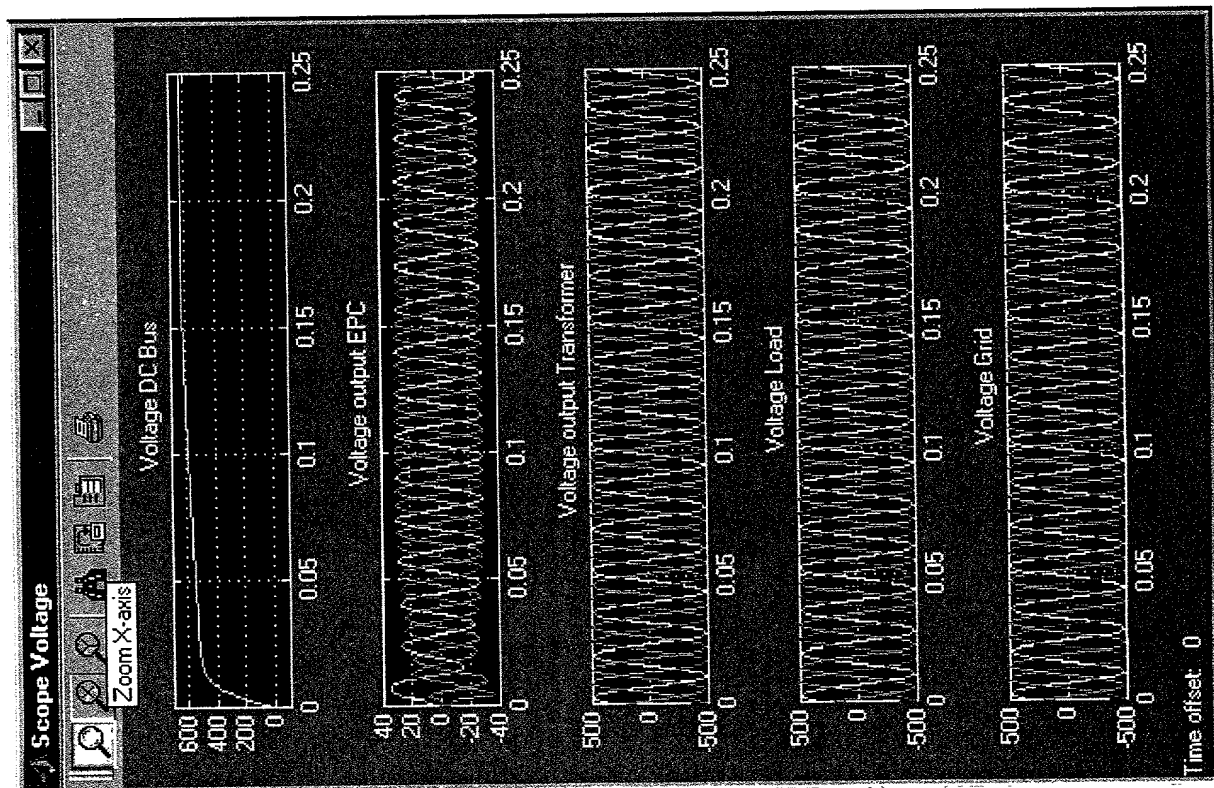
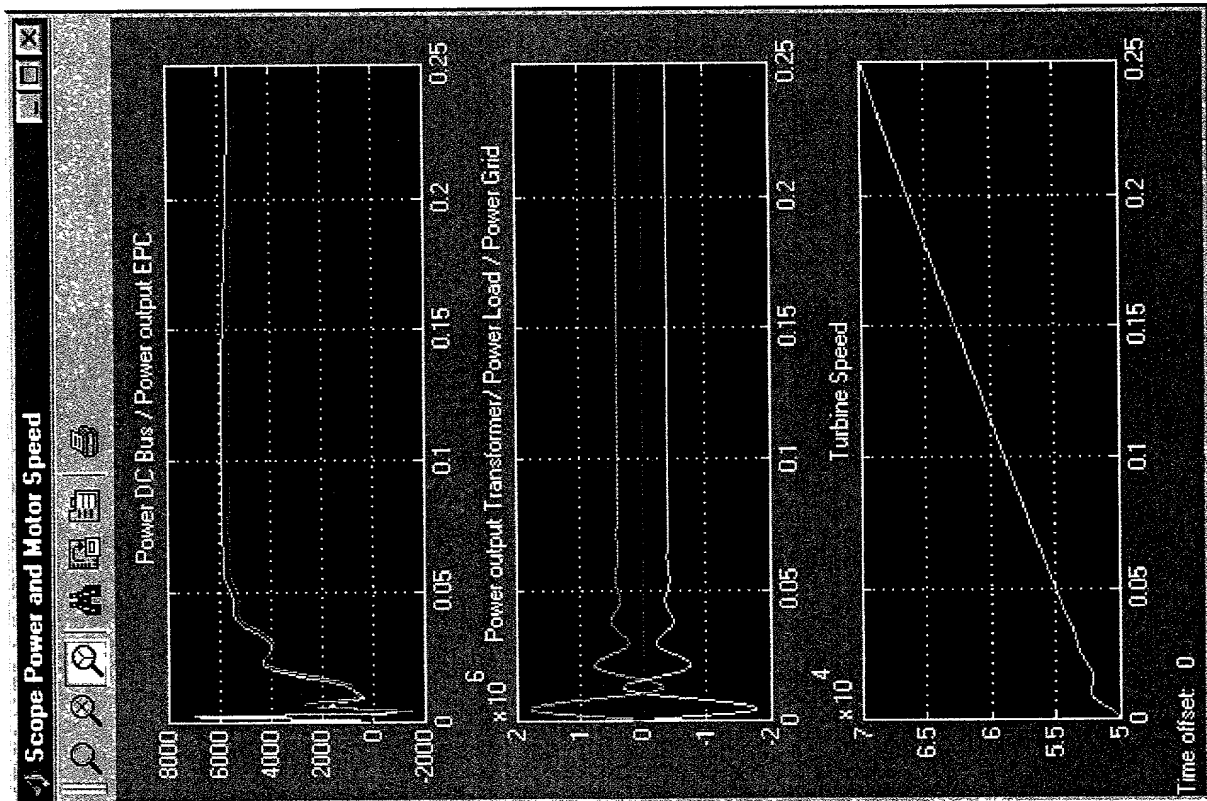
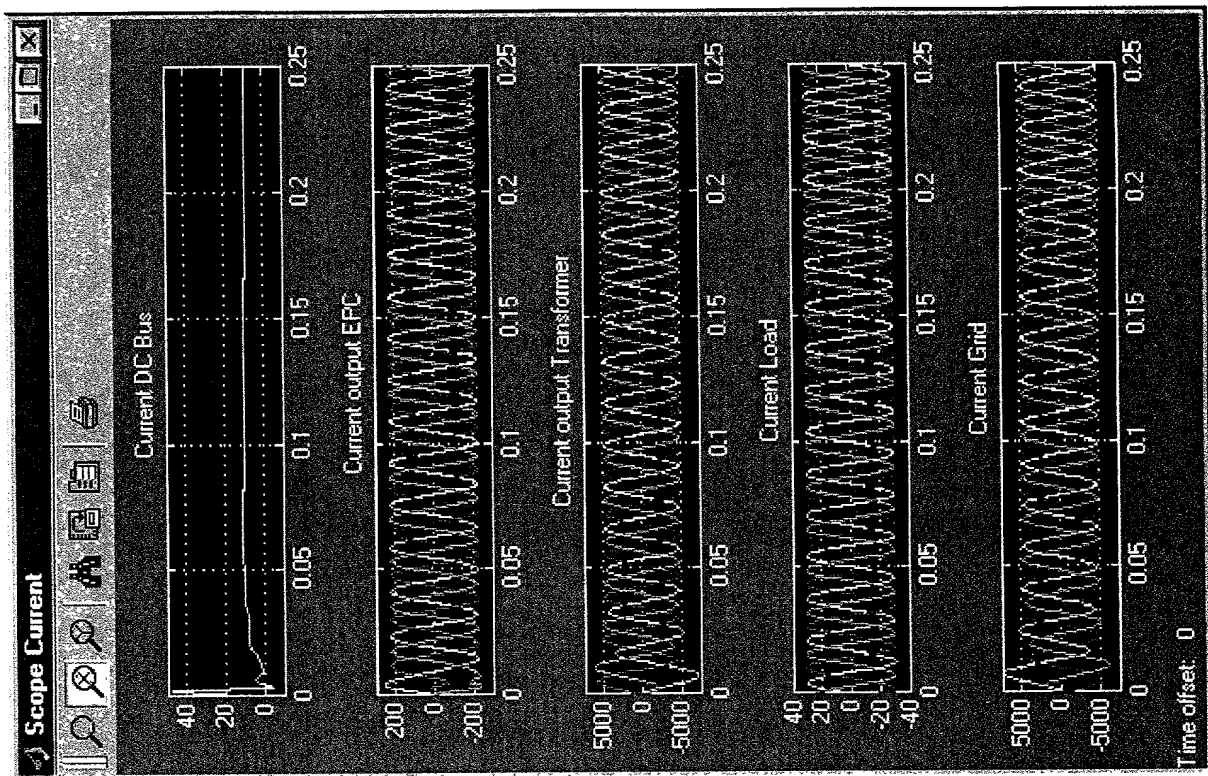


Figure 18

Figure 19



a.



b.